

Abstract

A low-emissivity multilayer system, capable of being bent and prestressed, for glazing panes, with silver as functional layer, comprises a sacrificial metal layer of Ti or an alloy of Ti and Zn and/or Al placed above the silver layer, antireflection dielectric layers and an oxide, nitride or oxynitride covering layer. The sacrificial metal layer contains chemically bonded hydrogen. An optionally Al- and/or In-doped ZnO layer is adjacent to the sacrificial metal layer. The covering layer consists of a titanium compound. Multilayer systems of this type can be manufactured relatively inexpensively and have a high hardness and a high chemical resistance. Their color parameters are very reproducible, even in the case of a heat treatment at high temperature.